Amendments to the Specification:

Please delete Table 1, including the title "Table 1," on page 19.

Please replace the sentence beginning on page 18, line 22, with the following amended paragraph (the phrase "Protein Expression" was underlined in the specification as originally filed):

-- Protein Expression In order to optimize correct folding for peroxidase activity, recombinant *Fucus* vanadium peroxidase constructs were prepared and expressed in *E. coli* as fusion proteins with thioredoxin at the N-terminal end (pET-32 LIC Ligation Independent Cloning vector, Novagen, Madison, Wis.). This vector produces a high level of expression of soluble recombinant proteins in E. coli cytoplasm. The expressed protein is fused with an N-terminal thioredoxin (Trx·Tag™), S·Tag™ and His·Tag™. for optimizing correct protein folding, detection and purification, respectively (Novagen). In addition, an enterokinase (EK) cleavage site is located at the N-terminal end of the inserted protein so that native protein can be cleaved from the 19 kDa tagged peptide following expression. Three sizes of constructs were prepared for confirmation of the active site domain at the 3' end, as suggested by the minimal fungal-Ascophyllum homology reported at the active site (Messerschmidt, *et al.*, PNAS, 93:392-396 (1996)). Expression constructs were prepared for the full length Fucus bromoperoxidase and two 5'-truncated forms, rVPx1, rVpx2, and rVPx3 ~~(Table 1)~~, corresponding to 100%, 80% and 54% of the full length sequence, respectively. The cloned λ-ZipLox plasmid containing the *Fucus* vanadium bromoperoxidase cDNA was used as the template for PCR amplification with Vent DNA polymerase (New England Biolabs, Beverly, Mass.).--

Please replace the sentence beginning on page 23, line 26, with the following amended paragraph (the phrase " Bacterial expression of Fucus vanadium peroxidase constructs" was underlined in the specification as originally filed):

--Bacterial expression of Fucus vanadium peroxidase constructs. The three recombinant Fucus VPx proteins (rVPx1, rVPx2, and rVPx3 ~~rVPx, Table 1~~, FIG. 1) were expressed as soluble cytoplasmic proteins in both BL21(DES) and AD494 strains of *E. coli* at the expected sizes of recombinant proteins. All of the recombinant proteins were seen as major bands against the background of bacterial proteins. This represents production of about 1-10 mg/100 mL of recombinant proteins, as estimated from the intensity of Coomassie blue-stained bands.--